AMENDMENTS TO THE SPECIFICATION

Please add the following new section to the specification, prior to the paragraph beginning on line 40 of page 2 of the specification:

--BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a representative schematic of a possible arrangement of a hydrogenation reactor with a circulation system, heat exchangers, and MXDA workup.

FIG. 2 shows a longitudinal-sectional view of a preferred embodiment of a mixer nozzle.

FIG. 3 shows a cross-sectional view of different alternatives of feeding the circulation solution into the mixer nozzle.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION--

Please replace the paragraph beginning on line 28 of page 7 of the specification with the following amended paragraph:

--Figure 1 shows one possible arrangement of the hydrogenation reactor with circulation system and heat transferers. The phthalonitrile melt is fed as a stream [1] of the hydrogenation stage and mixed with the circulation stream [4]. Ammonia [2] is added in liquid form. This may be done either upstream of the mixing point with the phthalonitrile melt (as shown in fig. 1) or downstream thereof. Hydrogen <u>[3]</u> and any cycle gas are fed in and heated to the desired reactor feed temperature by means of an optional heat transferer. Gas and liquid may also be fed <u>[5]</u> to the reactor separately. Preference is given to setting the temperature of the streams to be mixed by means of heat transferers in such a way that no further heat transferer is required after mixing. Gas and liquid are preferably fed separately to the hydrogenation reactor. In the reactor, the hydrogenation proceeds virtually quantitatively, so that virtually no phthalonitrile is present any longer in the reaction effluent <u>[6]</u>. The reaction effluent may then be cooled, and gas and liquid are separated under pressure in a high-pressure separator. The liquid is partly circulated without

workup (stream [4]) and partly fed to workup (stream [9]). A portion of the gas is discharged [8] in order to prevent the accumulation of inerts (CO, N_2, CH_4, noble gases, etc.). The majority of the gas [7] is recycled to the reactor inlet via a compressor. In the event of not too high a pressure drop in the reactor, it is preferably also possible for this purpose to use an ejector jet nozzle (“water-jet pump”). Overall, the amount of cycle gas may be varied within wide ranges, for instance from several times the amount of fresh gas down to zero (method without cycle gas). The cycle gas mode is favorable in order to load the reactor on the gas side sufficiently for good mass transfer and in order to provide a sufficient entrainment stream for inert gases. In addition, a portion of the heat of reaction may be removed with the gas stream. With increasing temperature, an increasing amount of ammonia evaporates, which further enhances the cooling effect of the cycle gas. The reaction effluent (stream [9]) is then fed initially to a pressure distillation, in which liquid ammonia is obtained overhead (stream [10]) and substantially ammonia-free, crude xylylenediamine is obtained via the bottom (stream [11]), and the ammonia can be fed back to the hydrogenation stage in condensed form. The crude xylylenediamine is further purified, for example, by distillation.--